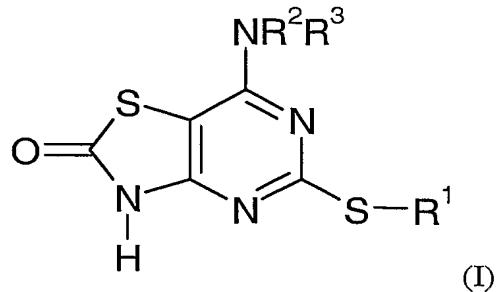


**CLAIMS**

1. A method for the preparation of a compound of formula (I) or a pharmaceutically acceptable salt or solvate thereof:

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in which

R<sup>1</sup> represents a C<sub>3</sub>-C<sub>7</sub> carbocyclic, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl or C<sub>2</sub>-C<sub>6</sub> alkynyl group, each of the groups being optionally substituted by one or more substituent groups independently selected from halogen atoms, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup> or an aryl or heteroaryl group, both of which may be optionally substituted by one or more substituents independently selected from halogen atoms, cyano, nitro, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl or trifluoromethyl groups;

R<sup>2</sup> and R<sup>3</sup> each independently represent a hydrogen atom, or a C<sub>3</sub>-C<sub>7</sub> carbocyclic, C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl or C<sub>2</sub>-C<sub>6</sub> alkynyl group, the latter four groups may be optionally substituted by one or more substituent groups independently selected from:

(a) halogen atoms, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>;

(b) a 3-8 membered ring optionally containing one or more atoms selected from O, S, NR<sup>8</sup> and itself optionally substituted by C<sub>1</sub>-C<sub>3</sub>-alkyl or halogen; or

(c) an aryl group or heteroaryl group each of which may be optionally substituted by one or more substituents independently selected from halogen atoms, cyano, nitro, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl and trifluoromethyl groups;

$R^4$  represents hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl or a phenyl group the latter two of which may be optionally substituted by one or more substituent groups independently selected from halogen atoms, phenyl, -OR<sup>11</sup> and -NR<sup>12</sup>R<sup>13</sup>

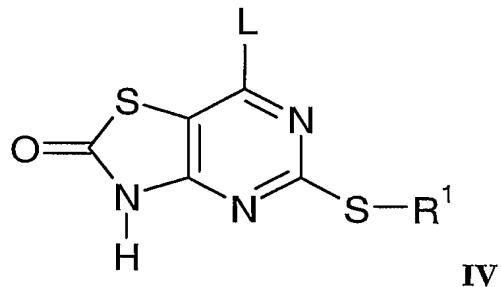
$R^5$  and  $R^6$  independently represent a hydrogen atom or a C<sub>1</sub>-C<sub>6</sub> alkyl or phenyl group the latter two of which may be optionally substituted by one or more substituent groups independently selected from halogen atoms, phenyl, -OR<sup>14</sup> and -NR<sup>15</sup>R<sup>16</sup>, -CONR<sup>15</sup>R<sup>16</sup>, -NR<sup>15</sup>COR<sup>16</sup>, -SONR<sup>15</sup>R<sup>16</sup>, NR<sup>15</sup>SO<sub>2</sub>R<sup>16</sup>

or

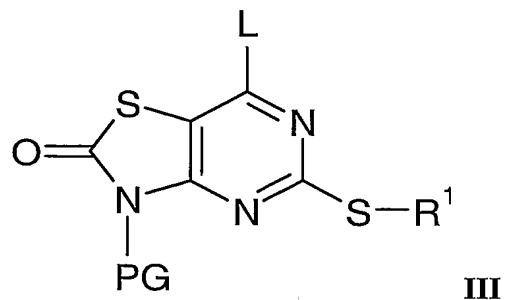
$R^5$  and  $R^6$  together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring system optionally containing a further heteroatom selected from oxygen and nitrogen atoms, which ring system may be optionally substituted by one or more substituent groups independently selected from phenyl, -OR<sup>14</sup>, -COOR<sup>14</sup>, -NR<sup>15</sup>R<sup>16</sup>, -CONR<sup>15</sup>R<sup>16</sup>, -NR<sup>15</sup>COR<sup>16</sup>, -SONR<sup>15</sup>R<sup>16</sup>, NR<sup>15</sup>SO<sub>2</sub>R<sup>16</sup> or C<sub>1</sub>-C<sub>6</sub> alkyl, itself optionally substituted by one or more substituents independently selected from halogen atoms and -NR<sup>15</sup>R<sup>16</sup> and -OR<sup>17</sup> groups;

$R^{10}$  represents a hydrogen atom or a C<sub>1</sub>-C<sub>6</sub>-alkyl or a phenyl group, the latter two of which may be optionally substituted by one or more substituent groups independently selected from halogen atoms, phenyl, -OR<sup>17</sup> and -NR<sup>15</sup>R<sup>16</sup>; and each of  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$  independently represents a hydrogen atom or a C<sub>1</sub>-C<sub>6</sub> alkyl, or a phenyl group.

which method comprises contacting

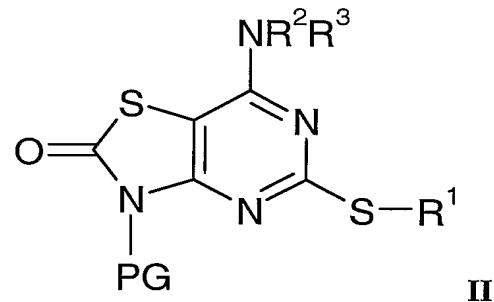


25 wherein L is a leaving group with a thiazole nitrogen protecting group reagent under appropriate reaction conditions to form a compound of the formula



wherein PG is a protecting group,

5 reacting the compound of formula III with an amine of formula  $\text{HNR}^2\text{R}^3$   
to form a compound of formula



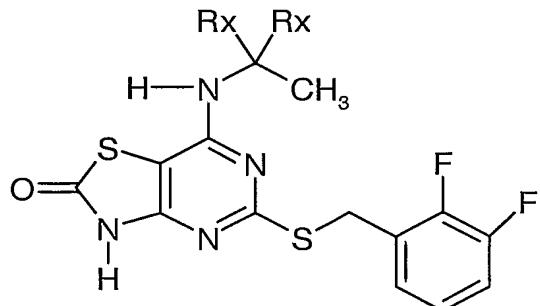
and deprotection of the compound of formula II to give a compound of the formula I, and

10 simultaneous or sequential conversion to a pharmaceutically acceptable salt or solvate thereof.

2. A method as claimed in claim 1 and wherein  $\text{R}^1$  represents an optionally substituted benzyl group.

15 3. A method as claimed in claim 1 or claim 2 and wherein one of  $\text{R}^2$  or  $\text{R}^3$  is hydrogen and the other is  $\text{C}_1\text{-C}_8$  alkyl substituted by hydroxy and one or more methyl or ethyl groups.

4. A method as claimed in claim 1 for the preparation of compounds of the formula Ia



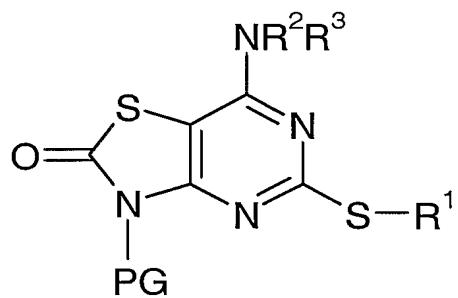
Ia

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wherein each  $R^X$  is independently selected from hydrogen, a  $C_{1-4}$  alkyl group optionally substituted by hydroxy, amino,  $-O-C_{1-4}$  alkyl,  $-S-C_{1-4}$  alkyl,  $-N-C_{1-4}$  alkyl,  $-NHSO_2R$ , or  $-CONR_2$  and provided that both  $R^X$  are not hydrogen or amino.

10 5. A method as claimed in claim 1 wherein each  $R^X$  is independently selected from hydrogen and hydroxymethyl, provided that both  $R^X$  are not hydrogen.

6. A compound of the formula

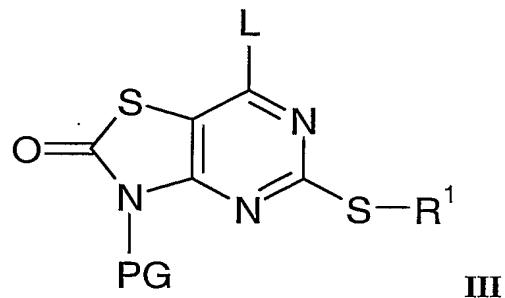


II

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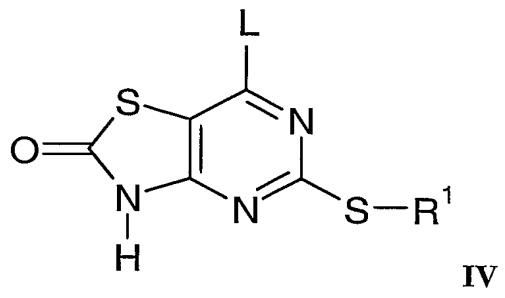
or a pharmaceutically acceptable salt or solvate thereof and wherein PG,  $R^2$ ,  $R^3$  and  $R^1$  have the meanings stated in claim 1.

7. A compound of the formula



5 or a pharmaceutically acceptable salt or solvate thereof and wherein PG, L and R<sup>1</sup> have the meanings stated in claim 1.

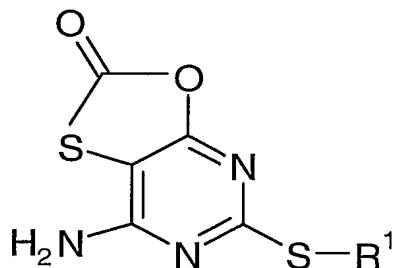
8. A compound of the formula



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or a pharmaceutically acceptable salt or solvate thereof and wherein L is a leaving group other than chlorine and R<sup>1</sup> has the meaning stated in claim 1.

15 9. A compound of the formula



**V**

or a pharmaceutically acceptable salt or solvate thereof and wherein R<sup>1</sup> has the meaning stated in claim 1.

10. A compound selected from

- 5 5-[[*(2,3-difluorophenyl)methyl*]thio]-7-[[*(1R)-2-hydroxy-1-methylethyl*]amino]thiazolo[4,5-*d*]pyrimidin-2(3H)-one, potassium salt;
- 5-[[*(2,3-difluorophenyl)methyl*]thio]-7-[[2-hydroxy-1-(hydroxymethyl)-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3H)-one, sodium salt; and
- 5-[[*(2,3-difluorophenyl)methyl*]thio]-7-[[2-hydroxy-1-(hydroxymethyl)-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3H)-one, potassium salt.